

RECEIVED

SEP 30 1996

DOCKET FILE COPY ORIGINAL

Before the
FEDERAL COMMUNICATIONS COMMISSION

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF SECRETARY

Washington, D.C. 20554

In the Matter of

Implementation of the Local Competition
Provisions in the Telecommunications Act
of 1996

Interconnection between Local Exchange
Carriers and Commercial Mobile Radio
Service Providers

CC Docket No. 96-98

CC Docket No. 95-185

**PETITION FOR PARTIAL RECONSIDERATION AND
CLARIFICATION OF MFS COMMUNICATIONS COMPANY, INC.**

David N. Porter
Vice President, Government Affairs
MFS COMMUNICATIONS
COMPANY, INC.
3000 K Street, N.W., Suite 300
Washington, D.C. 20007
(202) 424-7709

Andrew D. Lipman
Russell M. Blau
SWIDLER & BERLIN, Chartered
3000 K Street, N.W., Suite 300
Washington, D.C. 20007
(202) 424-7500
Fax (202) 424-7645

Attorneys for
MFS Communications Company, Inc.

No. of Copies rec'd
List A B C D E

246

Table of Contents

Summary	iii
I. INTRODUCTION AND OVERVIEW	1
II. THE COMMISSION SHOULD CLARIFY THAT THE DUTY TO NEGOTIATE IN GOOD FAITH INCLUDES A DUTY TO COMPLY WITH EFFECTIVE COMMISSION ORDERS, EVEN IF PETITIONS FOR JUDICIAL REVIEW ARE PENDING.	2
III. UNBUNDLED LOCAL LOOPS	4
A. The Commission Should Clarify That an Unbundled Loop Includes Access to the Network Interface Device.	4
B. The Commission Should Clarify the Circumstances Under Which Incumbent LECs May Impose Charges for Loop Conditioning and Similar Work.	5
C. The Commission Should Clarify That Cross-Connects Are a Required Network Element.	8
D. The Commission Should Reconsider Its Refusal to Require Subloop Unbundling.	9
IV. COLLOCATION	11
A. The Commission Should Clarify the Types of Equipment That May Be Used in Collocation Arrangements.	11
B. The Commission Should Reconsider Its Decision on Pricing of Virtual Collocation.	14
C. The Commission Should Clarify the Obligation of Incumbent LECs to Provide Collocation Cross-Connects for All Unbundled Network Elements and Tariffed Services	16
V. PRICING OF INTERCONNECTION AND UNBUNDLED ELEMENTS	18
A. The Commission Should Clarify Procedural Requirements for State Commission Review of TELRIC Studies	18
B. The Commission Should Clarify the Rules Regarding Geographically Deaveraged Rates	20
VI. RESALE	22
A. The Presumption Against Restrictions on Resale Should Extend to Geographic and Premises Restrictions That Plainly Target Resellers	22

B.	The Commission Should Reconsider Its Rule Regarding “Grandfathered” Services.	22
VII.	RECIPROCAL COMPENSATION	25
A.	The Commission Should Clarify the Circumstances Under Which New Entrants Are Entitled to Symmetric Transport and Tandem-Switching Charges.	25
B.	The Commission Should Clarify That Reciprocal Compensation Is Due on All Traffic Exchanged by the Parties.	28
VIII.	CONCLUSION	28

Summary

MFS strongly supports the overall policy and most of the specific provisions of the Commission's *First Report and Order*. Nonetheless, some provisions of this unusually comprehensive decision require clarification to smooth their implementation and avoid costly disputes over interpretation, while a few others should be reconsidered in order to more closely align the Commission's rules with the intent of Congress. The specific areas as to which MFS seeks reconsideration or clarification are set forth below.

Good-Faith Negotiation: Some incumbent LECs, although pursuing judicial review of the *1st R&O*, are also making it clear that they will not comply with that decision and will urge the State commissions to ignore it *regardless* of whether they are successful in obtaining a judicial stay. The Commission should declare that such conduct is a violation of Section 251(c)(1). Assuming that the Commission's rules are allowed to take effect by the courts pending judicial review on the merits, they are binding upon all parties and cannot be selectively ignored or flouted by incumbent LECs (or anyone else) that is dissatisfied with particular provisions.

Unbundled Local Loops: First, some confusion may be created by separate provisions of the *1st R&O* that, on the one hand, define an unbundled local loop as terminating in a Network Interface Device (NID), and on the other hand, define the NID as a separate network element. The Commission should clarify that an unbundled loop element includes access to the NID, although carriers also have the option of obtaining access to the NID as a separate, unbundled element.

Second, the Commission should clarify that incumbent LECs may not impose additional charges for conditioning or making ready unbundled loops, unless the requesting carrier seeks a

special loop capability or arrangement that cannot be provided using the least-cost technology on which the incumbent LEC's TELRIC costs are based. If, for example, the least-cost technology used in developing TELRIC costs is twisted copper pair, which is generally capable of transporting a variety of high-bandwidth services such as ISDN, ADSL, and HDSL, the incumbent LEC should not be permitted to impose a surcharge for conditioning loops to provide this transmission capability.

Third, although the Commission expressly required incumbent LECs to provide cross-connects between collocated equipment and unbundled loops, it did not specifically designate the cross-connect as a network element. The Commission should clarify that cross-connects must be provided under the same standards applicable to other required network elements.

Fourth, the Commission should reconsider its refusal to take action on subloop unbundling at this time. The incumbent LEC arguments that gave the Commission pause are in fact without merit and should not pose an obstacle to proceeding with further unbundling. Moreover, subloop unbundling would provide very clear and substantial public interest benefits by permitting more customers to benefit from competition in a wider range of services. The Commission therefore should proceed immediately with subloop unbundling, and should supplement the record on this issue if it considers the current record inadequate.

Collocation: First, the Commission's discussion of the types of equipment that may be placed in a collocation arrangement is likely to be confusing, especially as applied to data packet-routing equipment that cannot be easily classified as "switching" or "multiplexing" equipment. The Commission should not try to split hairs by applying these concepts from circuit-based networks to

the very different design of packet-based networks, but instead should clarify that packet-routing equipment may be collocated.

Second, the Commission should reconsider its refusal to require incumbent LECs to offer a “\$1 sale/buyback” option for virtual collocation. The only major LEC that has failed to offer this option, namely Southwestern Bell, has also proposed by far the highest non-recurring charges for collocation space preparation—*over a quarter of a million dollars per central office*. A sale/buyback option is essential to give requesting carriers an alternative to over-priced physical collocation space, and thereby to avoid lengthy and expensive litigation over the incumbent LEC’s cost studies.

Third, the Commission should clarify further the obligation of incumbent LECs to provide cross-connects between collocated equipment and their own network facilities. This LECs should be required to provide cross-connects to all unbundled network elements and all tariffed interstate access services. In addition, LECs should be required to provide cross-connects to carriers that are providing telephone exchange service or exchange access, either directly or indirectly (*i.e.*, by using the collocated equipment of a third carrier).

Pricing of Interconnection and Unbundled Elements: The Commission should clarify § 51.505(e)(2) of its rules, which requires that TELRIC studies be reviewed on the record of a proceeding in which all affected parties have an opportunity to participate. First, the Commission should clarify whether an arbitration between two carriers, in which other carriers may not intervene, satisfies this requirement. Second, the Commission should clarify that “on the record” review of a cost study requires that intervening parties have reasonable access to, and an opportunity to rebut, the underlying data and methodology of the cost study.

In addition, the Commission should clarify the mechanics of geographic deaveraging of network element rates. The deaveraging requirement should be applied on a state-wide, rather than a company-specific basis; and should not apply to every individual rate element if the costs for a particular element do not in fact vary on a geographic basis. Where proxy loop rates are concerned, the Commission should specify that the proxy loop ceilings apply to the weighted average rate on a state-wide basis, since the proxies were derived from state-wide data, and not on a company-specific basis.

Resale: The Commission should clarify that the provisions of Section 251(c)(4)(B), which preclude LECs from imposing unreasonable or discriminatory conditions or limitations on resale of their services, applies not only to conditions or limitations that expressly restrict resale, but also to conditions or limitations (such as restrictions on the geographic area within which a service may be used, or the number of premises to which service may be provided) that have a disparate or disproportionate impact on resellers.

Also, the Commission should reconsider its rule allowing incumbent LECs to restrict the resale of “grandfathered” services to a limited set of end users. This rule will permit LECs to undermine Congressional intent regarding resale by eliminating opportunities for competing carriers to aggregate traffic volumes from multiple end users and to combine resold services with their own network services in order to add value. LECs should be required to permit resellers to continue using “grandfathered” services without restriction for the same period of time they permit their own end users to retain the service.

Reciprocal Compensation: The Commission should clarify that requesting carriers are entitled to symmetric compensation at “tandem” levels whenever their switch is capable of serving a geographic area comparable to a LEC’s tandem serving area, regardless of how the requesting carrier’s switch is designated or what switching functions it performs. This symmetric compensation should include all rate elements, including both switching and transport, applicable to termination of traffic on the incumbent’s network via the tandem.

Also, the Commission should clarify that reciprocal compensation is applicable to *all* local traffic, including calls to or from enhanced service providers who are classified as “end users” under the access charge rules. It would be both impractical and inconsistent with the Act to make distinctions among different types of local calls based solely on their content or on the user’s identity.

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554**

In the Matter of)	
)	
Implementation of the Local Competition)	CC Docket No. 96-98
Provisions in the Telecommunications Act)	
of 1996)	
)	
Interconnection between Local Exchange)	CC Docket No. 95-185
Carriers and Commercial Mobile Radio)	
Service Providers)	

**PETITION FOR PARTIAL RECONSIDERATION AND
CLARIFICATION OF MFS COMMUNICATIONS COMPANY, INC.**

MFS Communications Company, Inc. ("MFS"), by its undersigned counsel, hereby petitions the Commission for partial reconsideration and clarification of the *First Report and Order* in the above-captioned dockets, FCC 96-325, released August 8, 1996 (the "*1st R&O*").

I. INTRODUCTION AND OVERVIEW

The *1st R&O* is a landmark decision designed to reshape the U.S. telecommunications industry. As the Nation's leading provider of competitive local telecommunications services, MFS heartily applauds the comprehensive, forward-looking, and most importantly pro-competitive approach of the Commission's decision and rules implementing Section 251 of the Communications Act of 1934.¹ The purpose of this Petition is not to challenge the basic purpose and intent of the *1st*

¹ The Communications Act of 1934, as amended by the Telecommunications Act of 1996, is cited herein as "Section ____."

R&O, but rather to seek fine-tuning of specific provisions in order to more fully implement the intent of Congress in adopting the Telecommunications Act of 1996.

II. THE COMMISSION SHOULD CLARIFY THAT THE DUTY TO NEGOTIATE IN GOOD FAITH INCLUDES A DUTY TO COMPLY WITH EFFECTIVE COMMISSION ORDERS, EVEN IF PETITIONS FOR JUDICIAL REVIEW ARE PENDING.

MFS requests that the Commission amend 47 CFR § 51.301(c) by specifying that, in addition to the actions and practices listed in that subsection, a carrier violates the duty to negotiate in good faith by refusing to enter into an agreement that complies with valid and effective Commission regulations or orders based on a contention that such regulations or orders are the subject of petitions for reconsideration and/or judicial review. Subsequent to the release of the *1st R&O* on August 8, some LECs have expressly refused to comply with provisions of the Commission's rules with which they do not agree. These incumbent LECs are attempting to hold interconnection negotiations hostage until their demands for reversal of this Commission's rules are met.

U S West has gone so far as to argue to State commissions in arbitration proceedings that they should simply disregard any portions of this Commission's rules with which they do not agree. In a brief filed with the Arizona Corporation Commission, U S West argued: "An arbitrator who believes that provisions of the FCC Orders are unlawful, either as contrary to the Act or in excess of the FCC's jurisdiction, *may ignore them* on the ground that they are *ultra vires* and instead, adopt rules inconsistent with the FCC Orders but consistent with federal law."² Although U S West's public position is the most extreme, other incumbent LECs have also asserted in off-the-record

² *Petition of MFS Communications Company, Inc. for Arbitration of Interconnection Rates, Terms, and Conditions with U S West Communications, Inc.*, Docket No. U-2752-96-362, U S West's Post-Arbitration Brief at 4 (filed Sept. 20, 1996) (emphasis added).

discussions that they will not voluntarily comply with those provisions of the *1st R&O* and other Commission decisions (such as the recent number portability rules³) with which they disagree, pending judicial review of those decisions.

U S West and the other incumbent LECs plainly have no legal right to ignore effective orders of this Commission, nor is it proper for them to urge State regulators to disregard the law. Of course, any party dissatisfied with a decision of the Commission is entitled to petition a United States Court of Appeals for judicial review, and to seek a stay of the decision pending such review either from this Commission or from the Court. Absent a stay, however, the Commission's order is effective and binding even though judicial review may be pending, as provided in Section 408 of the Act.⁴

Therefore, unless and until a Court of Appeals stays a Commission decision pending appeal, or issues a superseding order following review on the merits, all carriers are obligated to comply with all provisions of that decision, whether or not they agree with it.⁵

Under these circumstances, a refusal by a carrier to enter into an agreement that comports with this Commission's rules (including the proviso, required by 47 CFR § 51.301(c)(3), that the agreement may be amended if the rules change in the future) based upon that carrier's disagreement

³ *Telephone Number Portability*, CC Docket No. 95-116, First Report and Order and Further Notice of Proposed Rulemaking, FCC 96-286 (released July 2, 1996).

⁴ See, e.g., *Southwestern Bell Tel Co. v. Arkansas Public Service Comm'n*, 738 F.2d 901 (8th Cir. 1984).

⁵ At the moment, the *1st R&O* is subject to a temporary stay, pending oral argument on stay motions, imposed by the U.S. Court of Appeals for the Eighth Circuit. *Iowa Utilities Bd. v. FCC*, No. 96-3321 (8th Cir. Sept. 27, 1996). When that stay is lifted, however, as MFS is confident it will be, there should be no doubt as to the obligation of all incumbent LECs to comply immediately with all provisions of the *1st R&O*.

with or desire to appeal the rules is blatant bad faith. This conduct will frustrate negotiations and force requesting carriers to pursue arbitration and subsequent litigation simply in order to obtain agreement terms to which they are entitled as a matter of law. Although MFS is confident that State commissions will comply with the Act and adopt terms consistent with the Commission's rules,⁶ requesting carriers, which generally have far less extensive resources than the incumbent LECs, will have to waste considerable amounts of time and money litigating unnecessary arbitration proceedings (and, inevitably, appeals from the arbitration orders) to achieve this result. The Commission should not tolerate such blatant disregard and manipulation of the law.

III. UNBUNDLED LOCAL LOOPS

A. The Commission Should Clarify That an Unbundled Loop Includes Access to the Network Interface Device.

In para. 380,⁷ the Commission defines the local loop element as "a transmission facility between a distribution frame, or its equivalent, in an incumbent LEC central office, and the network interface device at the customer premises." This definition does not clearly include accessible terminations on both ends of the loop. Para. 392 requires incumbent LECs to provide access to the network interface device (NID) as a separate network element. The latter provision could create some ambiguity as to whether an unbundled local loop element terminates on the subscriber side of the NID (in which case use of the NID would be part of the loop element), or on the network side

⁶ In particular, Section 252(c)(1) specifically requires that a State commission resolving issues and imposing conditions in arbitration shall "ensure that such resolution and conditions meet the requirements of section 251, *including the regulations prescribed by the Commission pursuant to section 251.*" (Emphasis added.)

⁷ All references herein to "para. ____" are to paragraphs of the *1st R&O*, unless otherwise indicated.

(in which case the requesting carrier would have to obtain access to the NID as a separate network element in addition to the unbundled loop element).

MFS believes that an unbundled loop should expressly include both a termination on the main distribution frame (or equivalent) and access to the NID (that is, it should terminate on the subscriber's side of the NID). The purpose of an unbundled loop is to gain access to a subscriber's premises, and this access cannot be achieved without access to the NID. An unbundled loop without access to the NID would serve no useful purpose. For these reasons, the Commission should clarify that an incumbent LEC is required to include the NID as an integral part of an unbundled local loop.⁸

The discussion of access to the NID in paras. 392-395, in context, is plainly directed to the case where a requesting carrier constructs its own loops and desires access to inside wiring, and is not applicable to carriers that use unbundled LEC loops instead of constructing their own facilities. In this context, the NID is a subloop network element. Although MFS below asks the Commission for reconsideration of its decision to defer action on subloop unbundling, the Commission should reconfirm the requirement for unbundled access to the NID regardless of whether it acts on any other subloop elements.

B. The Commission Should Clarify the Circumstances Under Which Incumbent LECs May Impose Charges for Loop Conditioning and Similar Work.

At various points in the discussion of unbundled loops in Section V.J. of the *1st R&O*, the Commission states that incumbent LECs may recover from new entrants the costs of performing

⁸ If the contrary interpretation were adopted, the LEC would still have to combine the unbundled loop and the unbundled NID upon request of another carrier; *see* paras. 294-95. And, if an unbundled loop did not include access to the NID, then any costs associated with the NID would have to be excluded from the price of the unbundled loop element.

certain tasks to make loops ready for use on an unbundled basis. For example, para. 382 states that LECs may recover the cost of loop “conditioning” to provide “services not currently provided over such facilities.” Para. 384 states that the costs of unbundling loops provided over integrated digital loop carrier (IDLC) facilities may be recovered from requesting carriers. However, the Commission did not state clearly whether these costs were to be treated as part of the forward-looking economic costs of providing all local loops, and therefore recovered from all loop purchasers on a non-discriminatory basis; or alternatively recovered on a loop-specific basis through non-recurring charges imposed only on those carriers that request the particular conditioning or unbundling.

MFS requests clarification of this issue, and suggests that the answer should depend on the nature of the work required to condition or unbundle the loop. If the cost of a particular functionality or arrangement is recovered through the generally-applicable loop charges based upon forward-looking economic costs, then the incumbent LEC should not be permitted to recover twice for that functionality or arrangement through additional conditioning or preparation charges. Under the Commission’s rules, forward-looking economic cost is to be based upon “the use of the most efficient telecommunications technology currently available[.]” 47 CFR § 51.505(b)(1). If “the most efficient telecommunications technology” for loops is a network capable of providing ISDN, ADSL and HDSL transmission capabilities without special conditioning, then rates based on forward-looking economic cost would already recover the cost of providing these capabilities, and it would

be inappropriate for an incumbent LEC to impose additional charges for "conditioning" loops to meet these transmission specifications.⁹

Similarly, in the case of IDLC-delivered loops, rates based on forward-looking economic cost may already account for the cost of demultiplexing. This will depend on the particular technology used in developing the costs. If the cost study is based on a network design that does not include the use of IDLCs, or includes the cost of next-generation systems that permit integrated demultiplexing of individual loops, then it would be inappropriate to allow an additional charge for rearranging IDLC-delivered loops. On the other hand, if the loop rates are based on a cost study that demonstrates IDLCs are in fact the most efficient technology for delivering certain loops, then some added charge for rearranging IDLCs to permit unbundling could be justified.

The resolution of these issues in particular cases will necessarily be fact-specific. As a general rule, however, the Commission should clarify that incumbent LECs may impose additional charges for preparation of unbundled loops only if the requesting carrier asks for a capability or technology that is more costly than the network design assumed in a forward-looking cost study.

Based on testimony of multiple LECs in arbitration proceedings, MFS believes unloaded copper facilities are still the forward looking design for loops shorter than 18,000 feet. Such facilities, when properly installed, will support ISDN, ADSL and HDSL without further

⁹ Current technology may, however, be limited in that it can support ISDN, ADSL and HDSL transmission only within certain distances of the central office. *See* para. 381. Thus, incumbent LECs might be able to justify additional charges, in particular instances, for additional work needed to extend digital transmission capabilities to more remote locations.

conditioning.¹⁰ MFS requests that the Commission clarify that incumbents may not require payments for conditioning loops to provide ISDN, ADSL or HDSL on loops shorter than 18,000 feet, at least as long as unloaded copper pairs are the least-cost transmission technology for loops.

Forward looking loop design for longer loops include some form of digital loop carrier to a remote node with loops extended from that node to the customer on unloaded copper pairs. In these cases, loop conditioning still is not required. Rather, new entrants will require subloop unbundling to gain access at the remote node to the copper pairs. The new entrant will gain access to the node by procuring the appropriate facilities from the ILEC, from another provider or by building its own facility.

C. The Commission Should Clarify That Cross-Connects Are a Required Network Element.

Para. 386 specifies that incumbent LECs must provide cross-connect facilities between an unbundled loop and a requesting carrier's collocated equipment; and further states that rates, terms, and conditions for such facilities must comply with Sections 252(d)(1) and 251(c)(3). These references clearly imply that a cross-connect facility is an unbundled network element, but the Commission did not specifically include the cross-connect on its list of required network elements in 47 CFR § 51.319. MFS requests that the Commission clarify that a cross-connect facility is a required unbundled network element and is subject to all Commission rules pertaining to unbundled elements.

¹⁰ MFS is not suggesting that conditioning costs will not be incurred by ILECs, to bring their existing plant up to a modern standard. Rather, these costs are not incurred in a proper forward looking network design.

Further, MFS requests that the Commission clarify that incumbent LECs may not require MFS to pay for custom engineering of each cross-connect or pay for access to maintenance operating systems when neither are required for comparable ILEC services or when more cost effective alternatives are available. At least two RBOCs have proposed such requirements that they say drive non-recurring costs for some cross-connects as high as \$400. MFS believes both practices are simply ill-disguised efforts to block new entrants.

D. The Commission Should Reconsider Its Refusal to Require Subloop Unbundling.

In paras. 391-92, the Commission reviewed the parties' arguments concerning subloop unbundling (that is, unbundling different functional components within the overall "local loop"), but declined to take any action at this time based on its concern that the record had not been sufficiently developed. MFS respectfully requests that the Commission reconsider this decision and, if necessary, reopen the record to obtain additional information concerning the benefits and costs of, and any technical or logistical impediments to, subloop unbundling.

The Commission expressed hesitancy to act on subloop unbundling due to incumbent LEC arguments regarding network reliability, but many of those concerns are patently invalid. For example, in para. 391, the Commission noted incumbent LEC contentions that "access by a competitor's personnel to loop equipment necessary to provide subloop elements . . . raise network reliability concerns for customers served through [that equipment]." This argument, and similar arguments summarized in the remainder of para. 391, are based on the false premise that access to an unbundled network element necessarily requires *physical* access to the equipment used to provide that element. This is not true in any other unbundling scenario. Access to unbundled loops does not

require that requesting carrier's personnel have access to the poles and conduits carrying the loop facility—rather, the incumbent LEC simply cross-connects its loop facility to the requesting carrier's equipment, and only the incumbent LEC's personnel have physical access to the equipment used to provide the loop. Similarly, access to unbundled switching elements does not require that a requesting carrier's personnel have access to individual line or trunk cards, or to the operator's console that controls the switch's operation. It is simply absurd to suggest that subloop unbundling requires allowing requesting carrier personnel physical access to the LEC's loop plant, when no other form of network element unbundling raises such concerns. The incumbent LEC could reasonably require that its personnel provide cross-connections or similar interfaces between a requesting carrier's network and the unbundled subloop elements, thus eliminating these purported network reliability issues.

The Commission itself recognized the importance of subloop unbundling in promoting network design flexibility and in facilitating the provision of high bandwidth services to locations far from an incumbent LEC's central office. Para. 390. In addition, subloop unbundling would enable competitors to obtain access to premises currently served by IDLC technology (*see* paras. 383-84) without requiring potentially costly rearrangement of the incumbent's facilities to unbundle those loops. Requesting carrier could obtain unbundled access to the copper distribution wiring on the subscriber side of the IDLC, providing a direct transmission path to the subscriber's premises, so that the LEC would not be required to unbundle or rearrange its IDLC equipment at all.

In light of the undisputed bottleneck nature of loop facilities, the evident benefits of subloop unbundling, and the flimsy nature of the incumbent LEC arguments raised in opposition, MFS

respectfully submits that the Commission should reconsider its decision not to mandate subloop unbundling. If the Commission continues to believe that the record is insufficient to resolve this issue, then MFS recommends that it reopen the record rather than defer further action.

IV. COLLOCATION

A. The Commission Should Clarify the Types of Equipment That May Be Used in Collocation Arrangements.

In paras. 579-581, the Commission interpreted the provisions of Section 251(c)(6) to require incumbent LECs to provide for collocation of equipment that is actually used for the purpose of interconnection or access to unbundled network elements.¹¹ The Commission stated that this provision would encompass, for example, transmission and multiplexing equipment, para. 580, but not equipment used for enhanced services, para. 581. The Commission also declined to “impose a general requirement that switching equipment be collocated since it does not appear that it is used for the actual interconnection or access to unbundled network elements.” Para. 581. It noted, however, that “modern technology has tended to blur the line between switching equipment and multiplexing equipment,” and deferred to State commissions to determine in particular instances “whether the equipment at issue is actually used for interconnection or access to unbundled elements.” *Id.*

This “blurred line” between switching and multiplexing is especially troublesome in the area of digital, packet-based communications. Packet switching is a basic telecommunications

¹¹ Para. 579 specifies that the standard is not whether the equipment is “indispensable” for access or interconnection. Therefore, the mere fact that interconnection or access could be achieved without the presence of a particular piece of equipment is not sufficient to establish that this equipment is not “necessary” for access or interconnection.

technology that is becoming increasingly widespread in carrier networks as usage of the Internet and other data networks continues to grow, and which may have other applications as well.¹² Frame relay and Asynchronous Transfer Mode (ATM) are technologies related to packet switching and are also used in the transmission of signals in digital networks. The design of and equipment used in these technologies are very different from those found in traditional circuit-switched telephone networks (which may include analog or digital transmissions, or a combination of both). Therefore, the Commission's "switching/multiplexing" distinction may be difficult to apply to packet networks, and MFS requests clarification or reconsideration of this issue to provide greater guidance and certainty to negotiating carriers and to State commissions.

MFS suggests that the Commission determine that equipment used for the routing of digital signals in packet-based networks is "necessary for interconnection or access to unbundled network elements" if it is used to provide an interface between the incumbent LEC's network or unbundled network elements and the requesting carrier's packet transmission facilities. This definition would encompass various types of equipment used in routing packet communications, including some that are marketed under the name of "packet switches" or "data switches." Despite this nomenclature, packet routing equipment is not similar in function, size, or power consumption to circuit switches

¹² Although packet switching has often been used as a means of transmitting information to and from enhanced services providers, packet switching itself has been recognized by the Commission as a basic, not enhanced, service. *Amendment of Section 64.702 of the Commission's Rules and Regulations (Second Computer Inquiry)*, Final Decision, 77 FCC 2d 384, 420 (1980); *Independent Data Communications Mfrs. Ass'n, Inc. ("IDCMA")*, Memorandum Opinion and Order, DA 95-2190, 10 FCC Rcd 13717 (1995).

such as a 5ESS or similar end office switch.¹³ Rather, it plays a role analogous to that of multiplexers in a circuit-based network. Multiplexers are needed in collocation arrangements to combine individual circuits (which would otherwise be carried on separate physical facilities) onto high-capacity transmission facilities and permit the efficient use of those facilities. Similarly, packet routing equipment allows packets from a number of separate circuits to be combined onto a single high-capacity transmission facility for efficient transport to other locations on a carrier's network.¹⁴

In order for new entrants to come close to the network efficiencies that incumbent LECs can achieve, they need to place packet routing equipment at substantially the same points as the incumbent LECs do in their own networks. Otherwise, entrants would have to expend their often scarce dollars for additional transmission equipment and would have to unnecessarily utilize a greater portion of their cable facilities for transport to non-CO sites, creating a situation that would result in more limited deployment of competitive alternatives and potentially higher prices for consumers. Requiring the incumbent LECs to allow competing carriers to place such equipment in their collocation interconnection arrangements is therefore clearly consistent with the intent of Congress.

These same arguments support the proposition that new entrants also should be allowed to collocate remote switch modules (RSMs) of traditional circuit switches. Typically, RSMs require

¹³ It seems clear that the Commission intended that the *function* of equipment, not its name, would be determinative of whether it will be eligible for collocation under Section 251(c)(6).

¹⁴ It may also perform intra-network protocol conversions which, although transparent to the end-user, facilitate routing of the information through the carrier's network. See *Amendment of Section 64.702 of the Commission's Rules and Regulations (Third Computer Inquiry)*, Phase II, Report and Order, 2 FCC Rcd 3072, 3082 (1987); *IDCMA, supra*, 10 FCC Rcd. 13717, para. 16.

little space but require the controlled environment and power supply of a central office. The Commission should modify its decision at least to allow such collocation upon mutually acceptable terms.

B. The Commission Should Reconsider Its Decision on Pricing of Virtual Collocation.

In para. 607, the Commission declined to adopt a requirement that incumbent LECs offer virtual collocation under a "\$1 sale and repurchase option." The Commission should reconsider this decision and require LECs to offer this option, because the absence of such a requirement is being abused by one major LEC to demand excessive charges for both physical and virtual collocation.

As the Commission is aware, MFS and other competitive carriers raised a number of significant issues regarding the pricing of the initial round of virtual collocation tariffs filed by the incumbent LECs following the Commission's adoption of the current expanded interconnection rules,¹⁵ resulting in a suspension and investigation of these tariffs.¹⁶ Following this action, four of the five RBOCs (the sole exception being Southwestern Bell) that had tariffed virtual collocation prior to adoption of the 1996 Act, chose to offer a \$1 sale/buyback arrangement. Under such an arrangement, the carrier seeking interconnection has the option of providing the equipment to be used in the virtual collocation arrangement to the incumbent LEC for a nominal price (one dollar), subject to an agreement to repurchase the equipment at such time as it is no longer being used for

¹⁵ *Expanded Interconnection with Local Telephone Company Facilities*, CC Docket No. 91-141, 9 FCC Rcd 5154 (1994).

¹⁶ *Local Exchange Carriers' Rates, Terms, and Conditions for Expanded Interconnection Through Virtual Collocation for Special Access and Switched Transport*, Order Designating Issues for Investigation, 10 FCC Rcd 3927 (1995).

interconnection. Such an arrangement protects the incumbent LEC from any financial risk due to making an investment in equipment that might not recoup its value, while protecting the interconnecting carrier from excessive LEC charges for installation and operation of equipment. These arrangements have proven extremely successful in that disputes between incumbent LECs and interconnectors over the pricing of equipment in virtual collocation arrangements have essentially disappeared—again with the exception of Southwestern Bell.

The existence of a “\$1 sale/buyback” option will also help to limit disputes over the pricing of physical collocation under the Act. The existence of a virtual collocation option will act as a “safety valve” to protect against excessive pricing of physical collocation offerings. If an incumbent LEC sought to impose excessive charges for physical collocation, a requesting carrier would have the option of using virtual collocation under the \$1 sale/buyback arrangement and thereby could avoid the excessive charges without becoming tied up in potentially lengthy and costly regulatory pricing proceedings.

Southwestern Bell’s continuing refusal to offer a \$1 sale/buyback arrangement defeats the operation of this “safety valve” in its service area, and allows it the opportunity to delay the business plans of competitors by demanding excessive charges for both physical and virtual collocation. Although competitors will have the opportunity to contest these excessive charges through arbitration and other regulatory proceedings, the process of doing so will substantially delay their entry into markets served by Southwestern Bell. Perhaps not surprisingly, it is MFS’ experience that Southwestern Bell has in fact consistently demanded in negotiations the highest rates for physical collocation arrangements of any incumbent LEC. Southwestern’s proposed non-recurring charges

for several central offices in Texas and Missouri exceed *a quarter of a million dollars each*—enough money to build a very comfortable house, even in the most high-priced real estate markets, and certainly an excessive amount for building a ten-by-ten foot enclosure within a basically unfinished equipment room. These charges are much higher than those contained in the Southwestern Bell physical collocation tariff that was in effect during 1993 and 1994 for precisely the same arrangements, and much higher than space preparation charges being quoted currently by any other incumbent LEC.

In the immortal words of Yogi Berra, “It’s *deja vu* all over again.” Southwestern Bell is repeating precisely the same delaying tactics that several LECs employed after the adoption of its physical collocation rules in 1992. The Commission now has an opportunity to anticipate these tactics and put an end to them before they cause serious problems for new entrants and impede competition in the Southwestern Bell states. It can do that by reconsidering para. 607 and requiring all incumbent LECs to offer a “\$1 sale/buyback” option for virtual collocation.

C. The Commission Should Clarify the Obligation of Incumbent LECs to Provide Collocation Cross-Connects for All Unbundled Network Elements and Tariffed Services

In para. 565, the Commission determined that its *Expanded Interconnection* requirements, with some modifications, would be adopted as the rules applicable for collocation under Section 251(c)(6). Those existing requirements, codified at 47 CFR § 64.1401, provide among other things that a party placing equipment in an incumbent LEC’s premises through either physical or virtual collocation is entitled—

To use such equipment to connect interconnectors’ fiber optic systems or microwave radio transmission facilities (where reasonably feasible) with the local exchange

carrier's equipment and facilities used to provide interstate special and switched access services[.]

47 CFR § 64.1401(d)(2) (physical collocation) and (e)(2) (virtual collocation).¹⁷ The connection between the interconnector's equipment and the incumbent LEC's equipment and facilities is known as a "cross-connect."

The *1st R&O* expands somewhat on the cross-connect requirement contained in § 64.1401. First, paras. 590-91 establish that interconnectors may obtain cross-connects between collocated equipment and LEC transport facilities, regardless of whether the interconnector terminates its own fiber optic or microwave radio transmission facilities at the collocation premises. Second, paras. 595-95 establish that incumbent LECs are required to provide cross-connections between the collocated equipment of two different interconnectors. Third, para. 386 highlights the requirement that incumbent LECs provide cross-connect facilities between an unbundled loop and a requesting carrier's collocated equipment.

The *1st R&O* is not entirely clear, however, regarding incumbent LEC's obligation to provide cross-connect facilities between collocated equipment and other network facilities and services other than interstate access services (as required by the existing rules), other carriers' collocated equipment, and unbundled loops. Paras. 269 and 270, however, strongly suggest that the incumbent LECs are required to provide cross-connects between collocated equipment and *any* unbundled network element, and the Commission should clarify that this indeed is required. The Commission should also clarify that the existing requirement of § 64.1401 that cross-connects be provided to "facilities and equipment used to provide interstate special and switched access services" applies to

¹⁷ Paragraph (d)(2), apparently by oversight, omits the words "and switched".